

REMARKS

Status of the Amendments

Claims 1-20 are pending. Claims 1 and 14 have been amended. Claim 15 has been cancelled by this amendment.

Rejection Under 35 U.S.C. § 102(e)

The Office has rejected claims 1-6 and 8-20 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,821,932 ("Guinther"), for the reasons provided at pages 2 to 4 of the outstanding Office Action. Applicants respectfully traverse the rejection.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. MPEP § 2131. "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Applicants' claim 1 recites a two stroke engine fuel composition comprising: a combustible hydrocarbonaceous liquid fuel; lubricant comprising an oil of lubricating viscosity; a detergent comprising an alkaline earth metal-containing compound; and a molybdenum source. No such composition is taught by Guinther.

As discussed in the previous responses filed May 7, 2007 and November 20, 2006, Guinther does not specifically teach a detergent comprising an alkaline earth metal-containing compound. In order to satisfy the detergent element of the claims, the Office has relied upon a teaching of calcium at column 6, line 18 of Guinther, in combination with claim 18 of Guinther, which lists as one of several possible

organosulfur compounds, neutral metal-containing sulfonate detergents. According to the examiner, this amounts to a teaching of a detergent comprising an alkaline earth metal-containing compound.

However, Guinther's reference to calcium is merely an example showing results of an elemental analysis of oil used in a 1998 Cummins engine operated during thermal gravimetric analysis testing. Such a general teaching of "calcium" does not amount to a teaching of a detergent comprising an alkaline earth metal-containing compound, as recited by the present claims. Accordingly, applicants assert that Guinther does not specifically teach a detergent comprising an alkaline earth metal-containing compound.

Even if, for the sake of argument only, the calcium in Guinther did somehow amount to a detergent comprising an alkaline earth metal-containing compound, Guinther still fails to teach the claimed detergent in a two-stroke engine fuel. Instead, the calcium in the example of Guinther is part of a diesel engine oil analysis of a heavy duty diesel oil. Column 6, lines 14-19. Further, the Cummins M-11 engine is a four stroke engine, not a two-stroke engine. See the Chart showing M Series Specifications at page 2 of the attached M11 description.

<http://www.cumminsDiesel.uk.cummins.com>.... Therefore, Guinther fails to teach a two-stroke engine fuel comprising an alkaline earth metal-containing compound.

For similar reasons, Guinther fails to teach the methods of claims 8 and 19. Independent claim 8 recites a method that includes, among other things, intaking a fuel composition into a combustion system of a two-stroke engine, wherein the fuel comprises a combustible hydrocarbonaceous liquid fuel; lubricant comprising an oil of lubricating viscosity; a detergent comprising an alkaline earth metal-containing

compound; and a molybdenum source. Independent claim 19 is directed to a method for improving the durability of an after-treatment device for a two-stroke engine, comprising among other things, combusting a fuel composition containing a combustible hydrocarbonaceous liquid fuel; lubricant comprising an oil of lubricating viscosity; a detergent comprising an alkaline earth metal-containing compound; and a molybdenum source.

As discussed above, Guinther does not specifically teach a detergent comprising an alkaline earth metal-containing compound. And, Guinther fails to teach any method for employing such a detergent in a fuel employed in a two-stroke engine. Instead, the calcium in the example of Guinther is part of a diesel engine oil analysis of a heavy duty diesel oil. Column 6, lines 14-19. Further, the Cummins M-11 engine is a four stroke engine, not a two-stroke engine. Because Guinther fails to teach a detergent comprising an alkaline earth metal-containing compound in a fuel employed in a two-stroke engine, Guinther fails to teach every limitation as recited in claims 8 and 19.

Claims 2-6, 9-18 and 20 depend either directly or indirectly from, and therefore incorporate the limitations of, one of claims 1, 8 or 19. Accordingly, Guinther also fails to teach every element of these claims for the reasons set forth above.

Because every element of the claims is not taught, no *prima facie* case of anticipation exists and the rejection should be withdrawn.

#### **Rejection Under 35 U.S.C. § 103**

The Office has rejected claim 7 under 35 U.S.C. 103(a) as being unpatentable over Guinther in view of legal precedent, for the reasons provided at page 5 of the outstanding Office Action. Applicants respectfully traverse the rejection.

Claim 7 depends from, and therefore incorporates the limitations of, claim 1. For the reasons discussed above, Guinther fails to teach a two-stroke engine fuel comprising an alkaline earth metal-containing compound. The Examiner has failed to provide any additional reference or line of reasoning that would suggest or supply the missing teachings. Because every limitation of the claims is not taught or suggested, no *prima facie* case of obviousness has been established, and the rejection should be withdrawn.

### CONCLUSION

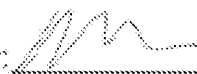
In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration of this application and the timely allowance of the pending claims.

If after consideration of this Amendment there are any outstanding issues the Examiner believes could be resolved by a telephonic interview, the Examiner is invited to call Applicants' undersigned representative at 703-917-0000, ext. 103, in order to expedite resolution of the issues and allowance of the application.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 50-2961.

Respectfully submitted,

Dated: July 6, 2007

By:   
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**Attachment:** webpage from  
<http://www.cumminsDiesel.uk.cummins.com/eu/pages/en/products/agriculture/m11.cfm>